

Docket No. AUS920010492US1

**CLAIMS:**

What is claimed is:

1. A method for end node partitioning for a physical element, comprising the steps of:

- 5       selecting a configuration of the physical element;  
      probing a port, wherein the port is probed with a subnet management packet by a subnet manager;  
      in response to detecting a switch associated with the port, assigning a local identifier to the port  
10       resulting in a configuration change of the physical element.

2. The method as recited in claim 1, wherein selecting the configuration of the physical element includes a static selection of the physical element and a dynamic  
15       selection of the physical element.

3. The method as recited in claim 2, further comprising:

- in response to a static selection of the physical element, modifying the configuration of the physical  
20       element through at least one of a fabric initialization and a reboot of a node associated with the port.

4. The method as recited in claim 2, further comprising:

- in response to a dynamic selection of the physical  
25       element, modifying the configuration of the physical element through a reboot of a node associated with the port.

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5. The method as recited in claim 1, further comprising:

in response to determining an additional port associated with the switch, assigning a local identifier to the additional port.

6. The method as recited in claim 1, further comprising:

in response to a host channel adapter and a host node becoming operational, reporting the host channel adapters and host processor node as they become operational.

7. The method as recited in claim 1, further comprising:

in response to removing a host channel adapter and a host node from operation, reporting the removal of the host channel adapter and the host node from operation.

8. The method as recited in claim 1, further comprising:

connecting one or more operating system images to at least one host channel adapter.

9. The method as recited in claim 8, wherein the host channel adapter is a virtual host channel adapter.

10. A physical element, comprising:

at least one switch; and  
at least one host channel adapter functionally connected to the at least one switch.

11. The physical element as recited in claim 10, wherein the at least one switch is at least one virtual switch.

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16. The system as recited in claim 14, further comprising:

5 a modification component, in response to a static selection of the physical element, for modifying the configuration of the physical element through at least one of a fabric initialization and a reboot of a node associated with the port.

17. The system as recited in claim 13, further comprising:

10 the assignment component, in response to determining an additional port associated with the switch, assigns a local identifier to the additional port.

18. The system as recited in claim 13, further comprising:

15 a reporting component, in response to a host channel adapter and a host node becoming operational, for reporting the host channel adapter and host processor node as they become operational.

19. The system as recited in claim 13, further comprising:

20 a reporting component, in response to removing a host channel adapter and a host node from operation, reporting the removal of the host channel adapter and the host node from operation.

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20. The system as recited in claim 13, further comprising:

a connection component for connecting one or more operating system images to at least one host channel adapter.

21. The system as recited in claim 20, wherein the host channel adapter is a virtual host channel adapter.

22. A computer program product in a computer readable medium for end node partitioning for a physical element, comprising:

instructions for selecting a configuration of the  
physical element;

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        instructions for probing a port, wherein the port is
probed with a subnet management packet by a subnet
manager;

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instructions, in response to detecting a switch associated with the port, for assigning a local identifier to the port resulting in a configuration change of the physical element.

23. The computer program product as recited in claim 22, wherein selecting the configuration of the physical element includes a static selection of the physical element and a dynamic selection of the physical element.

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24. The computer program product as recited in claim 23, further comprising:

5 instructions, in response to a static selection of the physical element, for modifying the configuration of the physical element through at least one of a fabric initialization and a reboot of a node associated with the port.

25. The computer program product as recited in claim 23, further comprising:

10 instructions, in response to a dynamic selection of the physical element, for modifying the configuration of the physical element through a reboot of a node associated with the port.

15 26. The computer program product as recited in claim 23, further comprising:

instructions, in response to determining an additional port associated with the switch, for assigning a local identifier to the additional port.

20 27. The computer program product as recited in claim 23, further comprising:

instructions, in response to a host channel adapter and a host node becoming operational, for eporting the host channel adapters and host processor node as they become operational.

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28. The computer program product as recited in claim 23, further comprising:

Instructions, in response to removing a host channel adapter and a host node from operation, for reporting  
5 removal of the host channel adapter and the host node from operation.

29. The computer program product as recited in claim 23, further comprising:

Instructions for connecting one or more operating  
10 system images to at least one host channel adapter.

30. The computer program product as recited in claim 29, wherein the host channel adapter is a virtual host channel adapter.

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